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GLOSSARY OF TEXTILE TERMS — NATURAL FIBRES

(*Second Revision*)

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GLOSSARY OF TEXTILE TERMS — NATURAL FIBRES

(Second Revision)

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Indian Standard

GLOSSARY OF TEXTILE TERMS — NATURAL FIBRES

(Second Revision)

0. FOREWORD

0.1 This Indian Standard (Second Revision) was adopted by the Indian Standards Institution on 15 November 1985, after the draft finalized by the Physical Methods of Test Sectional Committee had been approved by the Textile Division Council.

0.2 This standard published in 1958 was first revised in 1967. Based on the experience gained during the use of this standard, some of the definitions of terms have been revised and many new terms have been included.

0.3 In preparing this standard, considerable assistance has been derived from the Textile terms and definitions, 7 Ed. published by the Textile Institute, Manchester.

0.4 The other related standards on glossary of terms pertaining to different fields are listed below:

IS : 1324-1966 Glossary of textile terms relating to man-made fibre and fabric industry (*first revision*)

IS : 2364-1979 Glossary of textile terms—fabrics made from natural fibres (*first revision*)

IS : 3871-1984 Glossary of terms relating to fibre ropes and cordages (*first revision*)

IS : 4125-1967 Glossary of terms pertaining to defects in fabrics

IS : 9603-1980 Glossary of terms pertaining to textile processing

IS : 11265-1985 Glossary of terms pertaining to defects in yarns made from natural fibres

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1. SCOPE

1.1 This standard prescribes definitions of terms commonly used in the textile industry and trade relating to natural fibres.

2. DEFINITIONS

A

Abaca — *See* Manila Hemp.

Absolute Humidity — The mass of water vapour present in unit volume of air. This is expressed in g/m^3 (*see also* Relative Humidity).

Absorbent Cotton — Cotton fibre chemically treated after removing as completely as possible all fatty and other non-cellulosic ingradients, to render it adequately absorbent. Absorbent cotton may be sterilized for certain end uses, for example, medical purposes.

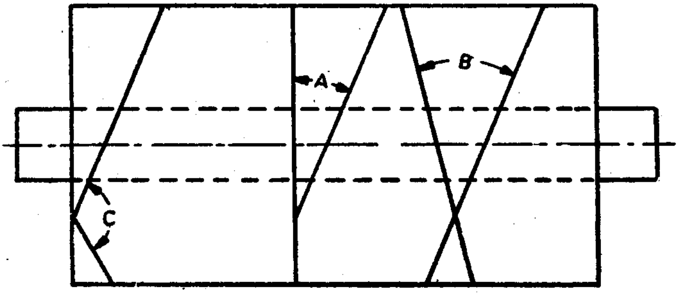
Alapat Yarn — *See* Coir Yarn (a).

Alpaca Fibre (Hair) — Fibre from the fleece of the semi-domesticated animal of the same name, or of the llama, both of which inhabit the high mountain regions of South America. It is soft, lustrous, of various colours and of fine quality with a length of 18-30 cm.

Ambhar Charkha — A simple hand-operated wooden frame contrivance for spinning yarn from natural fibres, working on principle of ring spinning with roller drafting.

Angle of Wind — The angle contained between a wrap of yarn on the surface of a package and the diametrical plane of the package.

NOTE — Other angles are yarn-crossing angle and yarn-reversal angle (*see* Fig. 1).



A — Angle of wind
B — Angle of crossing
C — Angle of reversal

FIG. 1 ANGLES MADE BY YARN WRAPS ON THE SURFACE OF A PACKAGE (CHEESE)

Angola

a) *Yarn* — A yarn spun on the woollen system from a mixture of wool and cotton or other fibres.

b) *Fabric* — A plain or twill fabric made from a cotton warp and an angola-yarn weft.

Angora Goat — An ancient breed of goats originally from Asia Minor but now largely grown in Texas, Turkey and South Africa. They range from 35 to 60 kg in mass and grow a long curly fleece which often reaches the ground. The commercial name for the fibre is Mohair.

Angora Yarn — An extremely soft yarn made from the hair of the angora rabbit. In most cases, it also contains a proportion of other fibres, the amount of which is limited to that which is necessary to facilitate spinning and must not be greater than 7 percent of the materials.

Anjengo Yarn — *See* Coir Yarn (b).

Aratory Yarn — *See* Coir Yarn (c).

Asbestos — A naturally occurring mineral of fibrous texture.

Asbestos Yarn — A twisted assemblage of

a) asbestos fibre;

b) asbestos and other fibres;

c) asbestos, other fibres and wires; and

d) asbestos and other fibres with an insert of cotton or other yarn.

Ashtamudy Yarn — *See* Coir Yarn (d).

Assortment (Jute) — The selection and classification of raw jute according to grades prior to packing or baling (*see* Grading of Jute).

Atmospheric Conditions for Testing (Standard) — The atmosphere in which physical tests on textile materials are performed. It has a relative humidity of 65 ± 2 percent and a temperature of 27 ± 2°C (*see also* IS : 6359-1971*).

B

Back Beam — A beam from which yarn is fed during the sizing process.

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*Method for conditioning of textiles.

Back Warp (or Weft), Backing Warp (or Weft) — Additional warp (or weft) on the back of a fabric, bound or stitched to the ground structure so that it does not interfere with the appearance of the face, giving greater weight, thickness, warmth, etc.

Bagging (Wool) — Sewing a piece of cloth along the selvedge before milling.

Balanced Twist — The twist in a plied yarn (or cord) is said to be balanced if the yarn or cord does not twist on itself when held in the form of an open-loop.

Bale — A compressed package of defined quantity of textile material in a form convenient for transit.

Bale (*KUTCHA*) (Jute) — A package of raw jute consisting of various heads (or *MORAHS*), usually weighing 150 or 130 kg and sometimes only 55 kg. It is compressed in a hand or steam-operated press and is bound with jute ropes.

Bale (*PUCCA*) (Jute) — It is hydraulically pressed bale of raw jute usually bound with jute ropes. Its standard size is 120 × 45 × 50 cm and its nominal net and gross mass are 180 and 185 kg respectively.

Bale (Loose) or *BORASHA* — A partly-pressed (also called half-pressed) package containing textile material.

Bale (Silk) — A defined quantity of raw silk carefully packed in a cotton 'shirt' and gunny cloth.

Ball Top — A cross-wound self-supporting sliver package produced on the worsted system.

Ball Warp — Parallel threads in the form of a leased twistless rope wound into a large ball by hand or by a mechanical balling machine.

Ballooning (Yarn) — The appearance of the curved paths of running yarns during spinning, doubling, or winding on, or while they are being withdrawn over-end from packages under appropriate yarn-winding conditions, for example, when yarn is withdrawn through a guide (often called a ballooning eye) placed above and in line with the axis of the package at an adequate distance from it; the yarn (travelling at sufficient yarn-winding speed) assumes the apearance of a balloon shape as it revolves during withdrawal from the package. The package may be stationary or rotated in the opposite direction from that of the original winding of the packages.

NOTE — The shape of the balloon is determined by several factors, among which are:

a) air-resistance of the passage of yarn around a package,
b) centrifugal force exerted on the revolving yarn,
c) the count and type of yarn,
d) yarn-winding speed, and
e) the length of the balloon.

Bands — Straps tightly bound round a bale or case to keep it secure.

Bassinas — The waste silk obtained from the residue cocoon after reeling.

Bast Fibre — Fibre obtained from the cell layers surrounding the steams of various plants.

Bast Liquor — A bath liquor prepared by acidifying soap solution that has been used for degumming of silk. It is used in silk dyeing as it greatly facilitates the production of a level shade. (An artificial bast liquor is prepared from a solution of gelatin in soap.)

Batch Process — A process in which a treatment is given to a textile material and stored for a specific period prior to further processing.

Batch (Jute) — A quantity of raw jute which has been selected from various assortments and is intended to be mixed together to produce yarn of desired type or quality.

Batching (Jute) — The process of selection into batches and treating jute fibres with oil-in-water emulsion and piling it, if needed, prior to carding.

Batt: Batting — An American term used to denote superimposed carded webs of the fibre in sheet form, for example, wadding.

Battens — Wooden slats put on the bales and held in place by means of bands to keep the shape of the bale intact.

Bave (Silk) — The bifilar thread spun by the silkworm. It consists of two filaments (bring) that are cemented together by gum or sericin.

B-Bottom (Jute) — Indicates a quality of raw jute (*see* Grading of Jute).

Beach Yarn — *See* Coir Yarn (e).

Beaming — The operation of winding the warp yarn on to a beam preparatory to slashing or weaving. The operation includes winding of the cloth on to the beams in wet processing.

Bearded Motes — *See* Motes.

Belani — *See CHARKHA* Gin.

Beypore Yarn — *See* Coir Yarn (f).

Bias Binding — A strip of material cut from a woven fabric at an acute angle to the warp (usually 45°) and sometimes folded along one or both edges.

BIMLI — It is a substitute for jute. It is generally inferior and coarser than jute obtained from the bast of *Hibiscus Cannabinus*. Chemically the fibre *Bimli* is different from jute mainly in its lower lignin content.

Bit Mats — *See* Mats (a).

Blaze — *See* Floss silk.

Blending

a) *General* — A process of mixing fibres of different lots, types and varieties to produce yarns having desired characteristics; and

b) *Wool for Market* — A process of mixing small lines of similar type and yield of wool fibres having desired characteristics.

Bloom — Brightness and lustre in raw cotton (*see also* Grading of Cotton).

Blowing — A type of crabbing wherein steam is blown through the material after it is wound on a perforated roller.

Blow-Room Droppings — Waste mainly consisting of seeds, motes, leaves, stalks, seed coats, burrs besides short and entangled fibres resulting from the blow-room treatment of cotton (*see also* Gutter Fly).

Boiled-Off-Liquor — *See* Bast Liquor.

Boiling-Off — The process of removing sericin from silk or other gummy material from fibres like ramie.

Boll — The fruit of cotton plant; generally it has 3 to 5 loculi, each of which contains about 6 to 10 seeds, the seeds being covered with cotton fibres.

Bombay-Hemp — A soft fibre obtained from the bast of the plant *Hibiscus Cannabinus* and other *Hibiscus* species. The plant reaches a height of 3 to 4·5 m and gives long and lustrous fibres fairly similar to jute.

Book (Silk) — A compressed package of raw silk weighing about 2 kg and containing a suitable number of skeins.

Book-Silk — *See* Tsatlee Silk.

Bottom (Jute) — Indicates a quality of raw jute (*see* Grading of Jute).

Bourre (French) (Silk) — *See* Gum Waste.

Bourettee (French) (Silk) — *See* Noils (b).

Bow

a) A device on a shuttle tip to separate the warp threads when they are likely to stick or hang together, or

b) A device for opening cotton.

Braid — The product of the braiding process. Certain types of narrow fabrics produced on the loom or on trimming machinery are sometimes described as braids.

Braiding : Plaiting — The process of interlacing three or more thread in such a way that they cross one another and are laid together in diagonal formation. Flat, tubular, or solid constructions may be formed in this way.

NOTE 1 — There are diametrically opposed opinions between sections of the industry regarding the exact meanings of 'braiding' and 'plaiting'. It is suggested, therefore, that as generic terms 'braiding' and 'plaiting' should be considered synonymous.

NOTE 2 — Fabrics made by this process may be constructed with or without core, gut, filler, or stuffing threads, which are not interlaced in the fabrics. For some applications, the core may be of insulated or uninsulated wire, or of rubber or other material. The tubular fabrics be used as sheaths or surrounds.

NOTE 3 — In the cordage trade, the term braided denotes a particular form of cordage manufacture. In solid-braided cordage, carriers usually travel in one direction, but the movement provides for interlocking between the strands. In a sense, this cord is more of an interlocked twisted cord than a plaited cord.

Break Factor — A number obtained by multiplying the breaking load of skein of yarn by the count of yarn expressed in an indirect system (that is, cotton count × pounds). This is also known as count strength product (CSP).

NOTE — A statement of the break factor of the skein must indicate the circumference and number of wraps in the skein if this is not otherwise apparent; without information on the number of wraps and circumference, a statement of the break factor is not correct.

Breaking Length — The length of a specimen whose mass is equal to the breaking load. Breaking length expressed in kilometres is numerically equal to the breaking tenacity expressed in g/tex.

NOTE — Breaking tenacity is expressed in Newtons/tex. The Newton is the SI unit of force. It is that force which when applied to a body having a mass of one kilogram, gives it an acceleration of one metre per second square (1 N = 9·81 kgf).

Breaking Load — The load that develops the breaking tension. It is correctly expressed in Newtons.

NOTE — The breaking load, if expressed in gram weight or kilogram weight will vary from place to place depending on the value of the accelaration due to gravity (g).

Breaking Stress — The maximum stress developed in a specimen stretched to rupture. The force is usually related to the area of the unstrained specimen. If the actual stress, defined in terms of the area of strained specimen, is used, then its maximum value is called the actual breaking stress.

Breaking Tension — The maximun tension developed in a specimen stretched to rupture. It is correctly expressed in Newtons.

NOTE — Breaking tension, as defined, is independent of the acceleration due to gravity (g).

Breaking Tenacity — *See* Tenacity.

Bright Silk — Thrown silk completely boiled-off or dyed or both.

Brin — The ultimate filament of silk as emanating from each gland of the silkworm. Two brins (one from each gland on either side of the body of silkworm) are cemented together by gum or sericin at the spinneret of the silkworm to emerge as bave or silk strand.

Bristle Fibre (a) *General* — A generic term for a short, stiff and coarse fibre, and

(b) *Specific* — A restricted term for the hair of the hog.

Broad - (Wool) — Wool that has no natural crimp or elasticity, particularly straight fibres.

Brush Mats — *See* Mats (b).

Brushing (Silk) — Act of transferring newly hatched silkworms from the egg sheets or muslin cells on to the rearing trays, or act of removal of floss from the cooked or boiled cocoons for collection of ends for reeling.

Bulked Yarn — A yarn that has been prepared in such a way as to have greater covering capacity, or apparent volume than that of conventional yarn of equal linear density and of the same basic material with normal twist (*see also* texturized yarn).

Bump Yarn — Very coarse condenser yarn. The count normally ranges from 260 to 1 250 tex.

Bundle (Yarn) — Skeins or hanks of yarn of definite length made up into a package of definite mass.

Burrs (Wool) — Dry seeds of certain weeds which get entangled in the fibrous coat of the sheep before it is shorn.

Burry Wool — Raw wool containing burrs.

Bursting Strength — The force required to rupture a fabric by distending it with pressure applied at right angles to the plane of the fabric. It is expressed in terms of force per unit area.

Bush Mulberry (Silk) — Mulberry cultivated as a bush to give more yield per unit area and to facilitate easy picking of leaves as compared to tree system of cultivation (*see also* Mulberry).

C

Cable Twist — A cabled yarn, cord or rope construction in which each successive twist is in the opposite direction to the preceding twist, as S/Z/S or Z/S/Z construction.

Cabled Yarn — A composite yarn produced by twisting together two or more plied yarns. The individual plied yarns have the same nominal length and tension (*see also* Cable Twist and Hawser Twist).

Caddis (Jute) — The short jute fibre droppings from different machines (such as preparatory machines and looms) during processing.

Camel Hair — The hair of the camel. There are two types:

a) the strong, coarse outer hair, ranging in length from 13 to 15 cm; and

b) the soft undercoat, light tan in colour and ranging in length from 4 to 5 cm.

Camouflage — Net used for camouflage purposes made from hard and soft twisted coir yarns with mesh size of 5-cm square or larger.

Candy — One of the units of mass (355·6 kg) used in cotton trade in India.

Carded Sliver — The long continuous twistless strand of fibres produced by the carding machine.

Carded Yarn — Yarn, made from cotton or other fibres, which has been carded but not combed.

Carding — The separation and partial cleaning by processing of a tangled or matted mass of fibres to a filmy web by working the fibres between two closely-spaced, relatively moving surfaces, clothed with pointed wire, pins, spikes or saw teeth.

Carrier (Fibre or Yarn) — A fibre or yarn introduced at some stage of processing to support the main component, generally as an aid to further manufacture.

***CARUVA* Yarn** — *See* Coir Yarn (d).

Case Cord — A cord consisting of two or more yarns twisted together, each yarn consisting of a cotton yarn covered in a long spiral by several rayon yarns. The resultant cord is soft and pliable.

Cashmere Wool — The fine soft wool fibre which forms the downy undercoat of Cashmere goat.

Centre Root (Book Chal) (Jute) — The hard bark present in the middle part of the jute fibre strand. It occurs due to faulty retting.

Centre Selvedge — *See* Patent Selvedge.

Cerite — Nett silk from which natural gum has been completely removed.

Chain (Coir) — Warp yarn in a coir matting.

Chapands (French) — Waste silk from native reeling skin to *CHARKHA* silk waste.

Chaple Silk Yarn — Silk varn spun from inferior cocoons and silk spinners waste.

***CHARKHA* (Cotton)** — A simple hand-operated contrivance for spinning yarn from natural fibres.

***CHARKHA* Cotton** — Cotton ginned with the aid of *CHARKHA* gin (also called *BELNI*), which is worked invariably by hand.

CHARKHA **(Gin)** — A simple hand-operated contrivance used for ginning of cotton.

CHARKHA **(Silk)** — A simple hand-operated contrivance for reeling raw silk.

CHARKHA **Silk** — Raw silk reeled on *CHARKHAS*.

CHARKHA **Yarn** — Yarn produced from natural fibres on *CHARKHAS*.

CHASSUM **(Silk)** — A term popular in West Bengal, to denote the silk waste obtained during reeling of cocoons, from polyvoltine races, for example, Bengal Chassum.

CHAVARA **Yarn** — *See* Coir Yarn (g).

Cheese — A cylindrical package of yarn usually cross-wound on a flangeless tube of wood, paper or other material.

Chemical Cotton — Chemically purified cellulose from cotton or cotton linters intended for use in the cellulose industries.

Chemicking — A process of bleaching non-protein fibre materials by means of a dilute hypochlorite solution.

Chesting — A process for compacting cloth in which the material after passing between all the bowls, usually 5, of a calender from bottom to top, is wound upon itself or either of the two upper bowls and later stripped therefrom.

Chiffon Twist — Hand-twisted, single, raw silk thread having about 2 000 to 4 000 tpm; used for making chiffons, 'mousseline do seie' (French), etc.

Chop — A trade-mark or ticket on a book of raw silk indicating its grade and name of the producer or shipper.

Cleanness Defects — Defects found in raw silk, such as waste, slugs, bad casts, knots, corkscrews, loops and loose ends.

Cleanness (Raw Silk) — The degree of cleanness of raw silk panels, determined on the basis of incidence of cleanness defects classified in super major, major and minor defects by using official standard photographs for cleanness. Cleanness is expressed as a percentage.

Cloth — *See* Fabric.

Cloudy Web — Generally refers to card web giving a patchy appearance due to uneven distribution of fibres.

Cobbler — A piece returned for redyeing due to off-shade.

Cockled Yarn — Yarn with lumpy places in it.

Cocoonage (**Silk**) — Appliance used for mounting mature silkworms to enable them to spin cocoons; also; known as *CHANDRIKE*.

Coccon (**Silk**) — The silken shell spun by the silkworm larvae for their protection in the pupal stage.

Coir Fenders — A spherical or cylindrical bundle of coir ropes or twisted yarns used as a shock absorber at the side of ship or boat for protecting it against the piers.

Coir Rugs — Matting pieces with or without bristles cut to the required sizes and finished at the edges.

Coir — A retted fibre obtained from husks of the coconut (*Cocos nucifera*).

Coir Yarn — Yarn spun from coir fibres by hand or machine usually 2-ply. Different varieties of coir yarn are as follows:

a) *ALAPAT Yarn* — Superior quality yarn spun by hand or machine and having soft twist.

b) *ANJENGO Yarn* — Yarn made of clean natural-coloured and hard twisted coir with smooth appearance and good wearing properities.

c) *ARATORY Yarn* — Yarn made of clean, natural coloured hard twisted coir with reasonable smooth appearance and being slightly hairy.

d) *ASHTAMUDY or CARUVA Yarn* — Yarn made from soaked fibre with medium twist and reasonable thickness, its runnage varies from 100 to 200 ft-lb.

e) *Beach Yarn* — Yarn spun from fibres of unsoaked or partly-soaked coconut husk. It is of light to dark brown colour with varying quantities of pith adhering to the fibres.

f) *BEYPORE Yarn* — Hand-spun yarn having substantial amount of pith adhered to the fibres.

- g) *CHAVARA Yarn* — Yarn produced from partly-soaked husk, hand spun, having medium twist and is pithy.
- h) *MANGADAN Yarn* — Hard-twisted machine-spun yarn. It is used for the manufacture of floor covering, ropes and for agricultural purposes.
- j) *Roping Yarn* — Thick hand-spun yarn used in the manufacture of ropes; also known as '*VANNUM* yarn'.
- k) *T-VYCOME Yarn* — Yarn similar to vycome yarn spun from shaving bits of yarn collected during spooling or rehanking process for baling.
- m) *VYCOME Yarn* — Yarn which is comparatively clean, light in colour, even in twist, and is soft.

Combing — Straightening and parallelizing fibres and removing short fibres and impurities by using a comb or combs assisted by brushes and rollers, pins and sometimes by knives.

Combing Wool — Long wool suitable for the manufacture of worsted yarn.

Comeback Wool — The wool produced by crossing two breeds of sheep to produce a cross-bred, then crossing the cross-bred with one of the original breeds; thus a comeback to the original.

NOTE — This term is usually used in the trade for wools which have bred back towards the marino.

Commercial Allowance — An arbitrary value equivalent to the commercial moisture regain plus an approved allowance for finish, formally adopted for use with the oven-dry mass when calculating:

- a) the linear density, or
- b) the commercial or legal mass of a shipment or delivery of any specific textile material.

Commercial Mass — The calculated mass that a consignment of textile material would have if either the commercial moisture regain were added to the dried mass of the material or the commercial allowance were added to the extracted and dried mass of the material.

Commercial Moisture Regain — The agreed value to be added to the mass of a defined material (after drying it using prescribed methods) in order to obtain its commercial mass, linear density or mass per unit area. It is expressed as a percentage of the mass of the extracted and dried material.

NOTE — The 'commercial moisture regain' and the 'commercial allowance' are sometimes referred to as the 'conventional allowance'.

Condenser Yarn — Yarn spun from sliver which has been consolidated from strips of card web by rubbing aprons.

Conditioned Mass — The mass of a textile material conditioned in the standard atmosphere for testing.

Conditioning — To allow textile materials (raw materials, slivers, yarns and fabrics) to come to hygroscopic equlibrium with the surrounding atmosphere or with the standard atmosphere for testing (*see* IS : 6359-1971*).

Cone

a) A conical support on which yarn is wound, and

b) A conical package of yarn wound on a conical support.

Continuous Filament Yarn — A yarn composed of one or more filaments that run the whole length of the yarn.

Convolution — Natural twist in cotton fibre.

Cooking (**Silk**) — The process by which the silk cocoons are treated in boiling water for a short time with a view to softening the filament for easy unwinding during the subsequent reeling process.

Cop — A package of yarn, tapered at one or both ends, produced on spinning frames or weft winders. The cop from spinning frame is either re-wound or directly used as weft in shuttles.

Cord — A term applied loosely to a variety of textile strands including:

a) cabled yarns;

b) plied yarns used in tyres; and

c) structures made by plaiting or braiding, for example, parachute cords (*see also* Cabled Yarn).

Cordage — All kinds of ropes, lines, cords and twines manufactured from natural or man-made fibres.

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*Method for conditioning of textiles.

Cordonnet Silk — Thick soft silk yarn consisting of two or more strands twisted together in one direction, each strand being made of a number of singles loosely twisted in the opposite direction.

Correct Invoice Mass — The mass of a consignment of a textile material which is declared on the invoice. It is usually numerically equal to the commercial mass.

Corridor Mats — *See* Mats (c).

Cortex — The principal body of wool fibre made up of elongated cortical cells.

Cotted Wool — Wool fibres which have felted together to form a cotted fleece. Also known as Matted Wool.

Cotton — Unicellular seed hairs of the *Genus Cossypium*.

Cotton Count — The linear density of cotton yarn expressed as number of 840-yd hanks/lb.

Count of Yarn, Yarn Count, Yarn Number, Yarn Linear Density (***n***) — A number indicating the mass per unit length or the length per unit mass of a yarn.

NOTE — Various counting systems, using different units of mass and length, have been in use, so the system used must be stated. The recommended system is tex.

YARN COUNT SYSTEMS

a) Direct systems

System	*Unit of Mass*	*Unit of Length*	*Conversion Factor to Tex*
Tex	gram	kilometre	1
Denier	gram	9 000 metres	0·111 11
Linen (dry spun), hemp, jute	Pound	14 400 yards (spyndle)	34·45
Silk	dram	1 000 yards	1·938
Woollen (Aberdeen)	Pound	14 400 yards	34·45
Woollen (American grain)	grain	20 yards	3·543

b) Indirect systems

System	*Unit of Length*	*Unit of Mass*	*Conversion Factor to Tex*
Asbestos (American)	100 yards (cut)	pound	4 960
Asbestos (British)	50 yards	pound	9 921
Cotton bump yarn	yard	ounce	31 000
Cotton (*British*)	840 yards (hank)	pound	590·5
Cotton (Continental)	kilometre	½ kilogram	500
Glass (USA and Great Britain)	100 yards	pound	4 960
Linen (wet spun)	300 yards (lea)	pound	1 654
Metric	kilometre	kilogram	1 000
Spun silk	840 yards (hank)	pound	590·5
Woollen (Alloa)	11 520 yards (spyndle)	24 pounds	1 033
Woollen (American cut)	300 yards (cut)	pound	1 654
Woollen (American run)	100 yards	ounce	310·0
Woollen (Dewsbury)	yard	ounce	31 000
Woollen (Galashiels)	300 yards (cut)	24 ounce	2 480
Woollen (Hawick)	300 yards (cut)	26 ounce	2 687
Woollen (Yorkshire)	256 yards (skein)	pound	1 938
Woollen (Yorkshire)	yard	dram	1 938
Worsted	560 yards (hank)	pound	885·8

Conversions

a) *Direct Systems* — To find the count in tex, given that in another system, multiply the given count by the conversion factor. To find the count in any system, given that in tex, divide the count in tex by the conversion factor.

b) *Indirect Systems* — To find the count in tex, given that in another system divide the conversion factor by the given count. To find the count in any other system, given that in tex, divide the conversion factor by the tex value.

c) *General Conversions* — To convert the count in one system to that in another, convert to tex and then convert to the second system by means of the above rules.

Count (Jute) — *See* Grist.

Count of Reed — *See* Reed Number.

Count Strength Product — *See* Break Factor.

Creel Mats — *See* Mats (d).

Crepe-de-Chine (French) Yarn — Hard twisted yarn, usually with 1 600 to 2 800 tpm generally made from 3 to 5 raw silk threads. It is used as weft in crepe-de-chine.

Crepe-Georgette Yarn — Twisted yarn usually with 2 000 to 3 600 tpm, generally made of two threads of raw silk.

Crepe Yarn — Highly twisted yarn generally with 1 200 to 4 000 tpm, used for producing crepe effect in woven or knitted fabrics.

Crimp

a) *Fibre* — The waviness of fibre.

Note — This fibre characteristic may be expressed numerically by reference to the number of waves or crimps per unit length or by the difference in distance between points on the fibre as it lies in an unstretched condition and the same two points when the fibre is straightened under suitable tension, expressed as a percentage of the unstretched length.

b) *Yarn* — The waviness or distortion of a yarn due to interlacing in the fabric.

Note 1 — In woven fabrics, the crimp is measured by the relation between cloth length and the corresponding length of yarn when it has been removed from the cloth and straightened under suitable tension.

Note 2 — Crimp may be expressed numerically as (a) percentage crimp, which is 100 × difference between yarn and cloth length divided by cloth length; or (b) crimp ratio, which is the ratio of yarn length to cloth length.

Note 3 — This definition could logically by applied to knitted fabrics or fabrics of pile construction, but it is preferable to employ special terms, such as, 'stitch length', 'take-up,' and 'terry ratio'.

Croisure — A technique of twisting raw silk over itself in the process of reeling with the object of consolidating the different filaments constituting raw silk, rounding off the angularities of the thread and squeezing off the extra moisture and gum.

Crop-End (Jute) — The hard bark at the tip part of the jute strand. It occurs due to defective retting.

Cropping — A process of shearing the protruding fibres from the surface of the cloth in order to give the cloth an improved appearance.

Cross-Bred Wool — Wool obtained from the cross-bred sheep.

Cross-Bred Yarn — Yarn made from cross-bred wool.

Crutchings — Wool removed from the back portion of the thigh of the sheep a month or two before final shearing.

Cuticle — *See* Epidermis.

Cut Marks (or Keel) — Marks made at intervals of definite length on warp during sizing.

Cuttings (Jute) — Hard and barky portions of jute strand cut off from the root end or crop end of the raw jute strands.

Cuttle

a) To place cloth in loose transverse folds, usually in open width.

b) To fold finished cloth down the middle and place it in transverse folds of pre-determined length.

NOTE — Folding finished cloth down the middle is termed 'rigging' in the wool trade.

Cut (Yarn)

a) A length of warp required to weave a piece of cloth; or

b) In the jute and flax trade, a skein measuring 274 m.

D

Daggings — Locks of wool clotted with earth or dung removed from fleece sometimes prior to final shearing.

***DAISEE* Jute** — *See* Jute.

***DALA* or Tray** — Local term to denote the receptacles to hold the silk-worms during the period of rearing.

Dead Cotton — An extreme form of immature cotton with a very thin fibre wall.

Dead Wool — Wool taken from sheep that have died from natural causes (*see* Skin Wool).

Decitex — One tenth of a tex unit (*see* Tex).

Decortication — A process of separating fibres from other vegetable material especially in the case of leaf fibres and coconut husk.

Deformation — A change in the shape of a specimen, for example, the increase in length produced as a result of the application of a tensile load or force.

Degreasing (Wool) — The removal of grease, suint and extraneous matter from wool by an aqueous or solvent process.

Degumming — *See* Boiling-Off.

Denaturation — The conversion of the protein of silk gland into insoluble silk filament.

Denier — The unit for expressing the linear density of man made fibres and silk filaments and yarns; weight in grams per 9 000 m of material.

Dent — The unit of a reed comprising a reed wire and the space between the adjacent wires.

Disease Free Seed (Silk) — Silkworm seed which has been certified as disease-free after microscopic examination of the mothe-moths.

Doffing — An operation of removing filled packages from a machine and usually followed by the operation of replacing them with empties.

Dollop (Jute) — A specified weight of jute fibres to be spread on the feed cloth of a breaker card or a hackling machine, as the case may be, in a given time usually indicated by the revoluation of a clock hand of the machine.

Double Cocoon — A cocoon jointly built by two silkworms; it serves as protective shell for both the worms during their pupal stage of existence. Such cocoons are readily distinguished by their size and toughness.

Doubling (Drawing) — A number of slivers, slubbings, rovings or laps fed simultaneously into a machine for drafting into a single end.

Draft — The amount of attenuation of textile material at different stages of spinning process; for example, 1 m of material delivered as 5 m is said to have undergone a draft of 5.

Drafting

a) The process of attenuating laps, slivers, slubbings and rovings to decrease the mass per unit length (*see* Drawing); and

b) The order in which threads are drawn through the heald eyes before weaving (*see* Drawing-in).

Draft Plan — The order of drawing warp threads through the eyes of healds or cambs.

Drawing — Operations by which slivers are blended (or doubled), levelled, and by drafting reduced to the stage of roving. In the cotton textile industry the term is applied exclusively to processing by the draw frame.

Drawing-in — An operation of drawing warp threads through the eyes of the healds or cambs and the dents or slits of the reed, in the order as indicated by the draft plan.

> NOTE — In automatic weaving, this operation includes the drawing of warp threads through the eyes of the closed-end drop wires whenever used.

Dressing (Jute) — A process of treating warp yarns with size prior to weaving.

Dressing (Silk) — In the spun silk industry, the process of sorting out fibres into groups of different lengths. Neps and noils are also removed during the process

Dressing (Warp Preparation) — The operation of assembling, on a beam, yarns, from ball warp, beam, or chain immediately prior to weaving.

Dry Spinning — A method of spinning used for flax tow, hemp, jute, etc. The essential feature is that the 'reach' must be quite long to prevent breaking of fibres. Usually the dry spinning frames are of flyer type.

Dumping Mats — *See* Mats (e).

Dupion (French) — Silk reeled from double cocoon, also known as 'Duppione' (Italian).

E

Ecru Silk — Thrown silk that has been washed in tepid soap solution to remove dirt, the original gum content being retained.

Elongation — Increase in length; extension. The increase may be expressed in units of length, percentage of initial length or fraction of initial length.

Elongation at Break — The elongation corresponding to the breaking load, that is, the maximum load.

ENDI (Silk) — Silk of white or brick red colour obtained from a species of domesticated lepidopteran insect (*Attacus Ricini*) belonging to the family *Saturnidae.* It feeds on castor leaves and is mostly a habitant of Assam, Bihar, Orissa and Andhra Pradesh.

Ends

a) *Spinning* — An individual strand;

b) *Weaving* — An individual warp thread;

c) *Fabric* — A length of finished fabric less than a customary unit;

d) *Piece* — Length (in certain districts a half-piece); and

e) *Finishing* — (i) Each passage of a length of fabric through a machine, for example, in jig-dyeing; and (ii) A joint between pieces of cloth due, for example, to damage or short lengths in weaving or damage in bleaching, dyeing and finishing.

Epidermis — In mammalian hair fibres, the outside or surface layer of the fibres consisting of flat, irregular, horny cells or scales.

ERI (Silk) — *See* ENDI.

Etching Silk — A hard-twisted silk sewing thread used for outlining embroidery.

Evenness

a) The uniformity of any textile material in terms of thickness or diameter or mass per unit length, and

b) (*See also* Unevenness Appearance).

Examined Silk Worm Seed — *See* Disease-Free Seed.

Extension — *See* Elongation.

F

Fabric Textile — A planer structure consisting of yarns or fibres.

Fabric Woven — A planer structure produced by interlacing two or more sets of yarns, fibres, rovings, or filaments where the elements pass each other essentially at right angles and one set of elements is parallel to the fabric axis.

Face — That side of a fabric which is meant for outer appearance when woven.

Fancy Yarn — A yarn that differs significantly from the normal appearance of single or plied yarn due to the presence of irregularities deliberately produced during its formation. In single yarns, the irregularities may be due to the inclusion of knots, loops, curls, slubs and the like. In plied yarns, the irregularities may be due to a variable delivery of one or more of its components or to twisting together dissimilar single yarns.

False Twist — Turns inserted in opposite directions and in equal numbers in adjacent elements of yarn, sliver, or similar aggregations of fibres or filaments, characterized by their temporary nature.

NOTE 1 — The extreme ends of the yarn or sliver are prevented from rotating, and the false-twisting element, through which the yarn or sliver passes, is situated between these ends.

NOTE 2 — At the start of the operation, turns of twist are inserted by the revolution of the twisting element (one turn in each direction on either side of the twisting element) but, as the yarn or sliver passes through the twisting element, each turn of twist carried through from one side concels a turn present on the other side.

NOTE 3 — The amount of twist actually inserted depends not only on the relative speeds of the twisting element (rev/min) and yarn or sliver (m/s), but also on the effectiveness of the means adopted in the twisting element to resist rotation, and on the restoring torque exerted by the twisted yarn or sliver.

NOTE 4 — False twist may be used:

a) to produce effects, for example; (1) the entanglement of fibres while false-twisted, (2) a measure of permanence to the twisted form, by heat-setting the false-twisted yarns; and

b) To assist processing for example, (1) the passage of sliver from Noble comb to can, (2) the attenuation of rovings on a condenser ringframe.

False Twisting — A process by which equal amounts of a twist are inserted and removed from successive sections of a textile strand (*see also* Bulked yarn).

Fastness — The property of resistance to the agency named (for example, washing, light, rubbing, crocking, gas-fumes).

Feel — *See* Handle.

Felling Marks — Marks in the form of a few pieces of yarn usually coloured, woven into fabrics at certain intervals to indicate where one piece finishes and another starts.

Felting — The matting together of fibres during processing or wear.

Fibre — A unit of matter characterized by flexibility, fineness, and high ratio of length to thickness.

Fibre Fineness — *See* Fineness Fibre.

Fibre Length

a) *Crimped Length* — The extent [*see* (b)] of a crimped fibre substantially freed from external restraint, measured with respect to its general axis of orientation; and

b) *Fibre Extent* — The distance in a given direction between two planes (each perpendicular to the given direction) that just enclose the fibre without intersecting it.

Note 1 — If the fibre is in a sliver (or yarn, roving, etc) and the direction of the extent is not specified, the 'given direction' is to be taken as the axis of the sliver.

Note 2 — It should be noted that the extent of a fibre is a variable quantity which differs from the straightened length of the fibre according to circumstances; thus, in a card web, for example, where the fibres are in a state of considerable same disarry, the extent of a fibre is markedly different from the extent of the same fibre after it has been passed through one or more drawing processes. If, for any reason, a fibre is subject to a stretching force, its extent in the direction of the force may be greater than its straightened length.

c) *Staple Length* — A quantity by which a sample of fibrous raw material is characterized as regards its technically most important fibre length.

Note — The staple length of wool is usually taken as the length of the longer fibres in a hand-prepared tuft or 'staple' in its naturally crimped and wavy condition (*see* crimp). With cotton, on the other hand, the staple length corresponds very closely to the model or most frequent length of the fibres when measured in a straightened condition.

d) *Straightened Length* — The length of a fibre when tensioned sufficiently to remove crimp or other axial deformation.

Note — Ideally, this dimension should be the length of the curving axis of the fibre when free from all restraint, but in practice it can be measured conveniently only after a small load has been applied. The application of a load sufficient to remove all crimp may in some cases result in an elongation of the fibre axis. Hence the most appropriate load to use will vary according to the form and properties of the fibre under examination.

Fibre Maturity Count — *See* Maturity Count, Fibre.

Fibre Mats — *See* Mats (f).

Fibre Strand (Jute) — The bast fibre in the jute plant situated between the outer bark and the central woody core and running the whole length of the stem as a lace work sheath usually several layers thick.

Fibre Strength — Average breaking load of a single fibre (*see* Strength).

Fibre Tenacity — *See* Tenacity.

Fibril (Cotton) — Thread-like aggregate of cellulose molecules constituting a morphological unit in cotton fibre. The fibril has a thickness of about 1 µm and is visible under a light microscope when the fibre is swollen in certain chemical reagents.

Fibrillation (Cotton) — The process of separation of fibres into fibrils by chemical-cum-mechanical treatment.

Fibril (Silk) — Fibrils are globules of fibroin formed in silk gland, but which subsequently did not fuse into the fibroin core during spinning of the filament by the worm and as such appear as tiny specks on the surface of the filaments.

Fibrillation (Silk) — The formation of fibrils on the silk filament. It is responsible for the defect known as 'lousiness' in dyed silk yarn.

Fibroin (Silk) — The fibre material of raw silk thread which is a protein not soluble in boiling water.

Filament — A fibre of indefinite length.

Filature — An establishment for the production of raw silk from cocoons, employing modern techniques, such as, steam for heating and power for driving the reels.

Filling

a) A synonym for weft yarn; and

b) Non-substantive and generally insoluble material, such as, china clay and gypsum, added to fabrics together with starches or gums during finishing to add weight to modify the appearance and handle of fabrics.

Fine End (Silk) — Yarn which is thinner than the rest of yarn in a hank; also called thin end.

NOTE — This is produced when reelers fail to cast filaments from the required number of cocoons.

Fineness Fibre — A measure related to the transverse dimensions of the fibre, like cross-sectional area, diameter, linear density, expressed in a variety of units

Finishing — The processing of fabrics to impart to them the desired appearance and feel by means of bleaching, dyeing, printing or in any other manner.

Flaggings — *See* Strings.

Flat Packed — Describes bales or trusses packed in a flat condition.

Flax Green: Natural Flax — Scutched flax produced from deseeded straw without any intermediate treatment such as retting.

Flax Fibre Bundles — The aggregates of ultimate fibre (*see* fibre ultimate) that run from the base of the stem up to the top of the branches of the flax straw. They are each composed of large numbers of ultimate fibres overlapping each other.

Flax Fibre Strands — Flax fibres after removal from the plant, consisting in the cross-section more than one ultimate fibres.

Fleece (Wool) — The entire fibrous crop shorn from a living sheep at one time in one piece.

Float — That length of warp or weft yarn which passes over two or more weft or warp yarns respectively. Floats are flaws, if they are accidental, a feature of design, if introduced purposefully.

Flocks — The stripped wool fibre obtained during various operations of scouring, milling, cutting, raising, etc.

Floss Silk — Silk from the outer part of the cocoon; it is of low grade and is available only in small amounts. It is also known as Blaze (French). The term is also applied to soft silk yarn or singles without twist, used in embroidery and electrical insulation of wires.

Fluff (or Fly) — Loose fibres which fly out into the atmosphere during processes, such as, carding, drawing, spinning and weaving.

Fluidity — The reciprocal of the viscosity expressed in poises (1 cP = 1 mPas).

Folded Yarn — Yarn composed of two or more single yarns twisted together.

Fribby Wool — Short tufts of wool obtained as a result of second cuts during one shearing.

Frison (French) — The silk waste brushed from the outer layers of cocoons prior to reeling. Such waste is also described as Strusa (Italian), Knubs (English) and *JOOTH* (Hindi).

Fulling — *See* Milling.

Fulpat — A term used for weak, gummy and immature jute fibres.

Fuzzy Motes — *See* Motes.

G

Gauge Knitting

a) A term specifying the spacing of the loop-forming elements in knitting and ancillary machines and expressed as the number of elements per unit of length; and

b) A term specifying the physical dimensions, usually thickness, of loop-forming elements.

Galettame — Waste silk from the inner part of cocoons (*see also* Bassinas).

Garnetting — A process of recovering the fibres from hard-twisted thread wastes, rags, clippings, etc, especially of wool. The object is to thoroughly break-up the material and return it to a fluffy fibrous condition so that it may be reused in blends, or in some cases alone.

Gassed Yarn — A yarn that has been passed through a gas flame to remove protruding fibres and improve the yarn by making it smoother in appearance.

Gassing — A process of burning off protruding fibres from the surface of yarn or cloth to obtain a smooth surface. Also known as singing.

Gauge Length Nominal

a) The length of a specimen under specified pre-tension measured from nip-to-nip of the jaws of the holding clamps at the beginning of the test; and

b) The distance between points at which the specimen is attached to tabs, measured while the specimen is under specified tension.

GHICHA — The yarn drawn by hand out of tasar cocoons without any twisting.

Gilling — An operation, preparatory to spinning, of passing wool or jute or flax or spun-silk fibres through one or more gill boxes in order to improve fibre parallelization.

Ginning — A process of separating lint from seed-cotton.

Ginning Percentage — The ratio of the mass of lint to the mass of seed cotton (*KAPAS*) expressed as a percentage.

Ginning (Roller) — A ginning process in which the fibres on seed cotton are made to adhere to the roughened surface of a rotating leather coated roller and are pulled out from the seed by the action of one or more knives.

Ginning (Saw) — A ginning process in which the fibres on seed cotton are gripped by saw teeth bordering a number of parallel discs on a rotating shaft. A suitably placed grid prevents the seeds from advancing with the fibres and thus the latter get wrenched from the seeds.

Glaze — The smooth, glossy and plane appearance of the surface of a fabric produced by the application of heat along with heavy pressure.

Grade (Cotton) — Classification of cotton according to colour, foreign matter and ginning percentage.

Grade (Silk) — Classification of raw silk on the basis of tests carried out according to standard methods in silk conditioning houses. The qualities taken into consideration are winding, size, tenacity, elongation, evenness, cleanness and neatness (*see* IS : 2938-1964*).

Grade (Wool) — Classification of wool according to their fineness, length and yield.

Grade (Yarn) — *See* Yarn Appearance.

Grading of Jute — Jute fibres are grown mainly in different districts of Assam, West Bengal and Bihar and also in small quantities in Orissa, Uttar Pradesh, Andhra Pradesh, Tripura, etc. Because of the difference in climatic conditions, seeds, soils, methods used and availability of water in different districts, these fibres vary widely in quality. Fibres grown even in the same district vary so widely that they are usually sorted out into various grades, such as tops, middles, bottoms, B-bottoms, X-bottoms and *HABIJABI*, the tops being the best and *HABIJABI* the worst.

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*Method of grading raw silk.

Grainage — An institution where silkworm seed is produced and sold to rearers.

Graineur — The person engaged in the production of silkworm seed.

Grandrelle Yarn — A 2-ply yarn composed of single yarns which differ from each other in colour or lustre.

Greasy Wool — Wool which has not been scoured.

Greasy Yarn (Wool) — Yarn which has not been scoured.

Green Cotton — Cotton lint obtained from bolls picked in an immature condition.

Grege (French) — Raw silk produced by filatures.

Grenadine Twist — Hard-twisted plied silk yarn with 800 to 2 400 tpm, composed of singles, which have been first twisted in the same direction and then have been twisted together in the reverse direction.

NOTE — It is used in the warp of grenadines which have to withstand severe friction.

Grey Cloth — Cloth in the loom state before it is scoured, bleached or dyed.

Grist — The linear density of bast fibre yarns spun on jute system expressed in terms of weight in pounds of one spyndle (14 400 yd) of yarn (*see* Count of Yarn).

Gum (Silk) — A sticky protein material that coats the filaments of raw silk. This is otherwise known as 'sericin'.

NOTE — The gum serves to cement together the two filaments of silk bave and aids in the formation of the cocoon; in silk manufacture, the gum is useful as a natural-size in weaving and in the construction of fabrics such as bolting cloth.

Gum Silk — Thrown silk from which gum or sericin has not been removed.

Gum Spots — Hardened places in skiens of raw silk caused, when, at some stage of production excessive moisture softens the gum in raw silk and the gum later hardens to form an aggregated mass of filaments and gum.

Gum Waste — Bits of silk collected as waste in the re-reeling of raw silk at the filatures or during throwing and weaving. It is also called '*STRAZZA*' (Indian) or 'Bourre' (French).

Gun Cotton — Raw cotton treated with a mixture of nitric acid and sulphuric acid having powerful explosive properties.

Gut Thread — A thread incorporated in a woven, knitted, or braided structure, primarily for the purpose of limiting its extensibility.

Gutter Fly — Very short fibres and dust taken out of cotton through the dust extracting cages during the blow room treatment; generally this is treated as a part of invisible loss.

H

HABILABI — This indicates a grade of raw jute in entangled form (not in *MORAHS*) (*see* Grading of Jute).

Hair — Animal fibre other than sheep's wool or silk. The term is also used for elongated cells growing from epidermis.

Hairiness — The condition of a textile material with numerous loose fibre ends or loops or both, projecting from its surface.

Halo-Length — A measure of fibre length made on a halo combed out on a cotton seed.

Handle — The subjective assessment of a textile material obtained from the sense of touch.

NOTE — It is concerned with the subjective judgement of roughness, smoothness, harshness, pliability, thickness, etc.

Hank

a) A synonym for skein;

b) A yarn or twine in coiled form;

c) A definite length of sliver, slubbing, roving or yarn, for example, 840 yards of cotton yarn; 560 yards for worsted yarn, etc;

d) A synonym, for count as applied to sliver, slubbing or roving, for example, 2-hank roving; and

e) The skein of a reel silk.

Hard Twisted Yarn — Yarn having more twist than normal.

Hard Waste — Yarn waste produced during spinning, preparatory and weaving processes.

Hawser Twist — A cabled yarn, cord or rope construction in which the single and first ply twist are in the same direction and the second ply twist in the opposite direction, S/S/Z or Z/Z/S construction.

Head (Jute) — Bundles of jute in a bale or raw jute usually weighing from 2·25 to 4·50 kg. Each head is given a twist and folded prior to packing in the bale.

Heavy-Conditioned Wool — Wool containing a large amount of yolk and foreign matter.

Hemp — A soft fibre obtained from the inner bark of the hemp plant, *Cannabis Sativa.* The fibres are steel grey to creamy white in colour usually occuring in a narrow flat ribbons of 1 to 2·5 m in length. It is used in the manufacture of ropes, twines and rugs.

NOTE — The term 'hemp' is indiscriminately applied to a great many fibres, for example, Manila hemp, Sisal hemp, Bombay hemp and Madras hemp.

Hoops — *See* Bands.

Hulls (Cotton) — The outer hard shells of cotton seeds.

***HUNKA* (Jute)** — Very hard jute strands running from the lower end up to practically the tip of the fibre. This is due to insufficient or no retting.

I

India Hemp — *See* Sunn.

Intrinsic Strength — The value obtained by dividing the mean single fibre strength by the mean fibre weight per unit length (synonemous with tenacity).

J

***JANGLI* (Jute)** — This is an inferior variety of jute coming mainly from some Bihar districts. This variety of jute is usually not properly retted or cleaned.

***JHURI* (Silk)** — Yarn spun out of tasar waste without subjecting it to opening processes.

JOOTH — *See* Frison.

Jute — A multicellular fibre obtained from the bast of various species of corchorus, of which the round pod jute (*Corchorus capsularies* or white jute) and the long pod jute (*Corchorus olitorius* or Tossa or *DAISEE* jute) are the most important. The fibres are long usually varying from 1·5 to 3·5 m.

K

KAPAS — A term used for seed cotton.

Kapok — A unicellular fibre obtained from the seed pods of the kapok tree, *ceiba pentandra* (*Eriodendron anfractuosum*) and *Bombax malabaricum*. The fibres are about 2·5 cm in length, white or twany in colour and have silky lustre. It cannot be spun into yarn. It is very light and is used mainly for stuffing purposes.

KATIA — The yarn spun out of tasar waste after opening and cleaning.

Keel — *See* Cut Marks.

Kemp — A coarse animal fibre with a wide lattice-type medulla, which is shed from the skin at least once a year; it is often shorter than fibres of the fleece, has a long tapering tip and, when completely shed, tapers sharply towards the root end.

Note 1 — Kemp fibres are usually chalky white in appearance, but may be coloured either very dark brown to black or reddish. Kemps are usually very strongly inherited. When dyed, because the cortex is relatively thin, they appear even much lighter in colour than normal fibres.

Note 2 — The use of this term is not necessarily confined to wool fibres.

Kenaf — The fibre obtained from the bast layer of the plant *Hibiscus cannabinus*.

Note 1 — Kenaf is commonly known as Mesta in India.

Note 2 — Being similar to jute in many of its properties, kenaf is used either as an alternative to or in admixture with jute.

Kete (Silk) — A term used for handspun tasar thread.

Khadi — Fabric woven on handloom using handspun yarn.

KHANDY — *See* Candy.

Kidney Cotton — A type of Brazilian cotton in which the seeds adhere together in clusters, making ginning difficult.

Kink — A definite deflection of a portion of the length of a fibre or yarn from the general direction of the remainder.

Kinky Yarn or Thread — *See* Snarly Yarn.

Knop Yarn or Thread — A fancy yarn with knops or lumps of one or more components at regular or irregular intervals,

Knot

a) A joining by tying together,

b) A tuft of yarn inserted in hand-made pile carpets, or

c) A package made up of a number of skeins.

L

Lamb's Wool — First clip of wool sheared off lambs which are less than 6 months old.

Lap

a) *General* — A sheet of fibres or cloth wrapped round a core with specific applications in different sections of the industry, for example, sheets of fibre wound on rollers or round endless aprons to facilitate transfer from one process to the next.

> Note — In cotton spinning, the sheets of fibre from openers and scutchers, sliver-lap machines, and ribbon-lap machines are wound on the cores; in worsted preparing, the gilled fibres from the sheeter box are wrapped round a wide apron.

b) *Flax* — An arrangement of the fibre strands in scutched flax pieced out of hacking or in pieces of hackled flax to facilitate their removal as separate units from built-up bundles.

> Note — In one method, a small bunch of fibres is separated from one side of the root laid across the centre of the pieces; the end is then folded round on to the under-side. In another method a half twist is inserted at the centre of the piece and compressed between thumb and first finger until the piece is placed in position in the bundle.

c) *Cloth* — The length of cloth between the successive transverse folds when pieces are plaited down or folded.

d) *Cloth* — An individual layer of cloth in roll form.

Laying (Silk) — The entire quality of eggs laid by a single moth.

Lea (Cotton) — A continuous length of yarn measuring 120 yards in the form of coil made on 1·5 yards girth reel.

Leasing — The operation of inserting a crossed traverse lease-cord in wraps of yarn on a reel for the purpose either of separating wraps into groups of specific numbers, for example, 120 or to prevent entangling of wraps of yarn during processing, for example, hank dying, to facilitate subsequent winding on a yarn package from hank supply after removal of the lease-cords.

Lea Strength (Lea Breaking Strength) — Breaking load of a lea of yarn (*see also* Breaking Load).

Light Conditioned Wool — Wool containing a small amount of yolk and foreign matter.

Linear Density — Mass per unit length. The preferred units of measurements are in grams and metres, or their multiples or sub-multiples. The tex (grams per kilometre) is recommended for yarns (*see* Count).

Linen — Yarn, thread or fabric made from flax fibres (*see also* Flax).

Linen Count — The linear density of linen yarn (wet spun), expressed as number of 300 yards hanks/lb (*see* Count).

Lint

a) The main fibres separated from the cotton seed by ginning; or

b) A plain-weave sterilized material with a raised fleecy surface, being highly absorbent and of a type made for surgical purposes made from cotton.

Linter — Very short fibres removed by delinting process from cotton seed already ginned.

Lisle Thread — A highly-twisted, plied (usually two-ply), good-quality cotton hosiery yarn, spun generally in fine counts. All lisle threads are gassed and some may be mercerized (mercerized lisle).

Lists — *See* Selvedges.

Llama — Hair of the South American llama (*see also* Alpaca).

Lock (Wool) — A tuft of wool.

Looming — A term covering the processes involved in preparing, the weaver's beam for the loom, for example, drawing-in, dropper-pinning, sleying, knotting, tying, etc.

Loop Length (Pile Structures) — The continuous length of yarn or fibres between the two successive lowest points of bindings of the pile in the substrate.

Lousiness — A defect in silk due to fibrillation of silk filaments. The filament splits up into fine fibrils, which form small neps and which in dyed fabric, are evident as white specks (*see also* Fibrillation).

Lovers-Knot-Mat — *See* Mats (g).

Lumen — A canal or central cavity in the fibre.

Lump — A length of unfinished fabric usually longer than the customary piece length.

Lustre — The display of different intensities of light reflected both specularly and diffusely from different parts of a surface exposed to the same incident light. Due to this reflection of light, the surface of textiles (fibre, yarn or fabrics) looks glossy or shinning.

M

Madras Hemp — *See* Bombay Hemp.

MANGADAN **Yarn** — *See* Coir Yarn (b).

Manila Hemp — A hard fibre obtained from the leaf stems forming the trunk of the Abaca plant Musa textiles. The fibres are long (1 to 3 m), rather coarse, creamy white to brown in colour quite strong and durable. It is extensively used for the manufacture of ropes and cordages.

Marabout Silk — Hard-twisted, stiff silk yarn dyed in the gum state, consisting of 2 or 3 untwisted or slightly twisted singles. It is used for crepes.

Marl Yarn — Yarn made by running together and drafting into one, two slubbings or rovings of different colour or lustre.

Matching

a) *General* — A process in which the proportions of the dyes present in a material are adjusted so that the final colour resembles that of a given sample as closely as possible; and

b) *Wool* — A process in wool sorting which consists of putting together those portions of different fleeces which correspond in quality.

MATKA — The yarn spun by hand appliances cut of mulberry pierced and other waste cocoons.

Mats (Coir) — These are characterized by their method of production as follows:

a) *Bit Mats* — The pile is produced by insertion of bits of coir yarn in place of the fibre or the *PUNJA* yarn.

b) *Brush Mats* — The pile is obtained by cutting topping or *PUNJA* yarns wound on a flat iron rod with groved rod interlacing the base fabric. Also called 'Rod Mats'.

c) *Corridor Mats* — The yarns forming the face of the mat are taken alternatively over metal rods in a series to make the required length. When the fabric is formed, the metal rods are removed and thick coir yarn is inserted to obtain the consolidated mat.

d) *Creel Mats* — The pile is produced by cutting the loops made from an additional set of warp yarn. The base fabric of a creel mat may be either of coir or jute or a mixture of the two depending on the quality.

e) *Dumping Mats* — Pillow like structures with straight sides from heavy grade matting made from *ANJENGO* or *ARATORY* yarn. It is tightly filled with cut coir fibres or coir yarn to give sufficient resiliency. The sides are sewn thoroughly with high-twist coir yarn. These mats act as shock absorbers when materials are unloaded from a lorry or a truck, thus preventing the material unloaded being damaged. Two loops of coir rope are provided at the two ends for lifting the mats.

f) *Fibre Mats* — The pile is produced by insertion of fibre around alternate warps. The fibre is held in place by weft yarn.

g) *Lovers-Knot Mat* — Obtained in a similar manner to the sinnet mat but instead of the braided yarn, ropes are used. A set of five ropes are used to form the mat in which neither the beginning nor the end of the rope can be detected.

h) *Matting Mat* — Obtained from cut-lengths of matting and suitably finished.

j) *Rod Mats* — *See* Brush Mats (b) above.

k) *Simet Mat* — Produced by suitable arrangement of braided coir yarn.

Matted Wool — *See* Cotted Wool.

Matting

a) *Coir* — Coir floor covering fabric woven on handlooms in plain, dobby and jacquard designs. Mattings are sold in standard length of 45 m but in different widths ranging from 30 to 275 cm. One individual piece of matting is called a unit.

b) *Jute* — Jute floor covering fabric woven in plain, striped, dobby jacquard designs.

Mattress Fibre (Coir) — The waste fibre obtained during the extraction of bristle fibre along with pith.

Maturity — The degree to which the lumen (or canal) of cotton fibre has been obtiterated by the cellulose laid down in the walls of the fibre.

Mean Fibre Length — The average measure of the fibre length.

Mean Fibre Mass per Unit Length — The quantity obtained by dividing the mean fibre mass by the mean fibre length.

Medium Cross-Bred Wool — Wools lying in the fibre diameter range of about 29 to 34 micrometres.

Medulla — The more or less continuous cellular narrow cavity/canal inside the cortical layer in most of the medium and coarse wools and hairy fibres.

Melange Yarn — A yarn produced from coloured printed tops or slivers, being distinguished from a mixture yarn, in that the fibres have more than one colour upon them.

Mercerization — The treatment of cellulosic textiles and blends in yarn or fabric form with caustic soda solution of desired strength whereby the yarns or fabrics are swollen, dye affinity and lustre of the materials are increased.

Merino Wool — Wool from pure bred merino sheep, normally having a mean fibre diameter of 25 microns or less.

Merino Yarn — Yarn made from merino quality wool.

Mesh (Fabric) — A fabric having appreciable openings/spaces between the threads.

MESTA — *See* Kenaf.

Metric Count — The linear density of yarns, expressed as number of 1 000 m hanks/kg (*see* Count of Yarn).

Middle (Jute) — Indicates a quality of raw jute (*see* Grading of Jute).

Mildew — A superficial growth produced by certain species of fungi.

NOTE — On textile materials, this may lead to discolouration, tendering, and variation in dyeing properties.

Milling (Cloth Finishing) — The process of consolidating or compacting woven or knitted fabrics which usually, though not exclusively, contain wool.

NOTE — The treatment, which is usually given in a cylinder milling machine or in milling stock, produces relative motion between the fibres of a fabric which have been wetted out and swollen with a liquid of suitable *p*H. Depending on the type of fibre and the structure of the fabric and on variations in the conditions of milling a wide range of effects can be obtained from a slight alteration in handle to a dense matting with considerable reduction in area.

Mill Rigs — Creases produced in milling.

Mixture Fabric — Cloth made of mixture yarns or of yarns made of different types of fibres, for example, wool and cotton, or wool and man-made fibres.

Mixture Yarn — Yarn made by mixing together of fibres of different characteristics, such as, colour, lustre, etc.

Mock Grandrelle Yarn — A single yarn with a grandrelle effect.

Modal Length — The central length of the group which in a fibre length frequency distribution contains the largest number of fibres.

Mohair — The hair of the angora goat.

Moisture Content — The weight of moisture in a textile material expressed as a percentage of the total weight.

Example

If 100 parts by weight of material contains 20 parts by weight of moisture, the moisture content is

$$\frac{100 \times 20}{100} = 20 \text{ percent}$$

Moisture Equilibrium — The condition reached by a sample or specimen in a controlled atmosphere when the net difference between the amount of moisture absorbed and the amount desorbed, as shown by a change in weight, shows no trend and becomes insignificant. For test purpose, moisture equilibrium shall be reached by absorption, starting from a relatively low moisture content.

Moisture Regain — The weight of moisture present in a textile material expressed as a percentage of the oven-dry weight.

Example

If 100 parts by weight of material contains 20 parts by weight of moisture, the regain is

$$\frac{100 \times 20}{80} = 25 \text{ percent}$$

Morah — *See* Head.

Moss (Jute) — The vegetable matter other than jute adhering to the jute fibre strands.

Motes — Small pieces of broken or crushed seeds or small immature seeds found in ginned cotton.

a) *Fuzzy Motes* — The largest of this type of mote consists of whole aborted or immature seeds covered with fuzz fibres and possibly also with very short lint fibres, the development of which ceased at a very early stage. Small fuzzy motes originate as either undeveloped or fully grown seeds, which are broken in ginning and disintegrate still further in the opening, cleaning, and carding processes.

b) *Bearded Motes* — A piece of seed coat with fairly long lint fibres attached.

Mottle Yarn — *See* Grandrelle Yarn.

Moulting — Shedding of skin by silkworm during its larval stage. The silkworm normally sheds its skin four times during its development.

Mourzouks — A floor covering produced on special looms, the surface and pattern of which is formed by the weft yarn and not by warp yarns as in coir matting; the warp threads are drawn back into the fabric after weaving (*see also* Carpets).

Muga Silk — Silk from the cocoons built by partly domesticated moth *Antheraea Assamensis.*

Mulberry — An urticaceous, hardy and perrenial tree of the genus morus; silkworms (Bombayx Mori) feed on its leaves.

Mulberry Silk — Silk mainly of yellow, white or greenish yellow colour obtained from domesticated silkworm Bombyx mori belonging to the family *Bombycidae* which feed on mulberry leaves.

Mule Spinning — A system of spinning on a mule frame in which the drafting of the roving, twisting of the yarn and winding it on the bobbin, takes place intermittently and not continuously (*see also* Ring Spinning).

Multivoltine Cocoons — Cocoons built by a silkworm race with more than two generations (life cycles) in a year.

Mungo — The fibrous material made in the woollen trade by pulling down new or old hard woven or milled cloth or felt in rag form (*see also* Shoddy).

Mushy Wool — Without any regularity of staple, obtained usually from old sheep in bad seasons. It is usually not combed as its yield of top is poor and the quantity of noils is large.

N

Nap (Wool) — Pile or cover obtained on cloth by raising, rubbing, etc.

Napping — A finishing process used for obtaining nap on the surface of cloth.

Naps (Cotton) — Small aggregates of loosely entangled cotton fibres. They are comparatively easy to remove from cotton and generally their individual fibres can be easily separated. They are larger than neps.

Nep — A small knot-like aggregate of tightly entangled fibres, usually not larger than a common pin-head (about 2 mm in diameter).

Nep Count — The number of neps per unit weight of material, usually expressed in terms of number of neps per gram.

Nett Silk — Raw silk filaments or strands which have been processed into yarns by twisting or folding or both.

Noils

a) *General* — Shorter fibres separated from longer fibres during the process of combing; or

b) *Silk* — Short stapled residue from the dressing operations in silk spinning.

Noils Yarn (Silk) — Yarn spun from silk noils.

Non-woven — A non-woven is manufactured sheet, web or batt or directionally or randomly orientated fibres, bonded by friction, and/or cohesion and/or adhesion, excluding paper and products which are woven, knitted, tufted, stitch-bonded incorporating binding yarns or filaments or felted by wet-milling whether additionally needled or not. The fibres may be of natural or man-made origin. They may be staple or continuous filaments or be formed *in situ*.

Northrow Silk — Two or more untwisted singles, which are doubled together with no more twist than is necessary to bind together the filaments of silk.

NOTE — The treatment given makes a very soft yarn and eliminate formation of loops.

O

Omatt Fibre (Coir) — The shorter fibres obtained while combing the bristle fibre.

Opening

a) A general term covering several processes in the preliminary treatment of raw cotton. The primary objects of which are to separate the compressed and matted masses of cotton into loose tufts and to remove the heavier and bulkier impurities.

b) A general term for opening of cloth from rope form to open width form through scutcher or opener machine.

Organizine — Yarn consisting of 2 or 3 single threads with Z-twist of 400 to 800 tpm, doubled with S-twist of 400 to 700 tpm.

Oven Dry Mass — The mass of a sample of textile materials dried to constant mass in a drying oven maintained at 140 ± 2°C for silk and 105 ± 3°C for other fibres.

Open Boil — Scouring of cellulosic textiles with alkaline liquors in open-topped vessels at or near to boiling point (*see* Scouring).

Note — Scours at temperatures lower than the boil are usually referred to as 'Steeps'.

Open-end Spinning — The production of spun yarns by a process in which the sliver or roving is opened or separated to its individual fibres or tufts and is subsequently reassembled in the spinning element into a yarn.

Ovule — Small undeveloped seed present in cotton.

P

Par Weighting — A degree of weighting that results in a degummed silk returning to its original weight. Thus it is considered that 100 lb of raw silk yields 75 lb of degummed silk and from this will be produced 100 lb of par-weighted silk. Par weighted silk is also known as 16 oz, weighted silk. Thus weighted silk of which 150 lb is produced from 100 lb of raw silk is silk of 24 oz weighting.

PASHMINA — *See* Cashmere Wool.

Patent Selvedge — A type ot selvedge formed within the width of cloth between the real selvedges of the cloth. This enables the cloth to be subsequently cut into narrower widths and prevents the cut edges so formed from frying; it is also called Split Selvedge. When the selvedge is at the centre of the width of the fabric it is called Centre Selvedge.

PAT — The local Bengali names for raw jute.

Photo Degradation — Degradation caused by electromagnetic radiation in the ultra-voilet, visible, and near infra-red wave-bands.

Note 1 — Photo degradation occurs only when electromagnetic radiation falls on the textile, but the resulting total degradation may depend on other factors.

Note 2 — The limits of the visible spectrum are ill-defined, but for most practical purposes the lower limit is 380 nm and the upper 780 nm. In daylight, the photo chemically active radiations are principally in the wavelength range 296-800

Pick and Pick — Putting in regular succession single picks of different characteristics, such as count and colour.

Picking

a) The operation of passing the weft through the warp shed (*see* shed) during weaving.

b) The rectification of the face and back of a carpet after manufacture including inserting missing tufts, replacing incorrect ones, and repairing broken yarns in the backing (local mending).

c) A process carried out before the final stage of cloth finishing to remove by hand any contamination (such as kemp, wrong fibre, coloured hair, etc) which has not been removed by previous processing. This process is carried out particularly during the finishing of suitings, face-finished cloths, and cream or off-white cloths.

Picks — The weft or filling yarn which lies across the length of fabric.

Piece Length — A customarily accepted continuous length of cloth.

Pierced Cocoon — Cocoon from which the moth has emerged after softening the end of the cocoon and forcing its way out.

Note — Pierced cocoons are not reelable and are used in spun silk manufacture.

Pile — The raised loops or tufts forming all or a portion of surface of certain types of fabrics or carpets.

Pitch — The average number of tufts or knots in carpets per unit area. Traditionally number of knot per sq inch.

Pilling — Small accumulations of fibres on the surface of a fabric. Pills can develop during wear, are held to the fabric by an entanglement with the surface fibres of the material.

Plain Weave — The type of weave in a cloth in which each warp thread for a pair of warp threads passes alternatively over and under each weft thread.

Plied Yarn — *See* Folded Yarn.

Ply — One of the component threads in plied or cabled yarn.

Plying — *See* Doubling.

Porter (Jute)

a) *Fabric* — The value obtained by counting in a jute fabric or jute product as marketed, the number of warp threads per full gauge length of 47 mm (or 37/20 in) and dividing it by the number of threads per split. (2 for hessian, 4 for double warp plain fabric and 6 for double warp twill cloth).

b) *Reed* — Number of groups of 20 splits over 94 cm (37 in).

Preconditioning — To bring a sample or specimen to a relatively low moisture content [equilibrium in an atmosphere between 10 and 25 percent RH and not exceeding 50°C (*see* Note)] prior to conditioning in a controlled atmosphere for testing. (While preconditioning is frequently translated as predrying, specimens should not, in fact, be brought to the oven-dry state).

NOTE — These conditions may be obtained by heating air at 65 percent RH and 27°C (the standard atmosphere) to a temperature up to 50°C.

Pre-tension — The relatively low tension used to remove kinks and crimp when mounting a specimen preparatory to making a test and used to establish the nominal gauge length.

Proofing — A chemical treatment of fabric to make it resistant to water, fire, insects, rot, moth, etc.

Protein — A natural polymer, consisting of amino acids linked together by the peptide group (— —CO— —NH— —). Examples are silk, wool and other animal hair fibres.

Pull (Sampling) — The act of manually abstracting a sample of fibres from a bulk lot of raw material or sliver with a view to assessing the length and/or distribution of length of fibre within the sample.

Pulled Wool — *See* Skin Wool.

Puppa (Silk) — The resting stage in the life cycle of a lepidopteran insects (it is also called Chrysalis Stage). During this stage, replacement of larval organs by that of the adult is realized.

Pure Dye Silk — Silk dyed but neither weighted nor adulterated.

R

Raising (Wool) — *See* Napping.

Ramie — A soft fibre obtained from the bark of the ramie plant, *Boehmeria nivea* and *B. tenacissima*, belonging to the nettle family. The fibres are from 10 to 100 cm in length, white in colour, very strong and durable and have silky lustre. It is still being used in the manufacture of fabrics for dress goods, sports clothes, table cloths, etc.

Ratch

a) The distance between the nips of the front and back rollers in a roller drafting system (synonym, reach).

b) A slight additional drafting of the yarn, which takes place towards the end of the mule draw.

Raw Silk — The silk reeled by drawing together the required number of filaments from cocoons; it contains its original gum or serioin.

Real Selvedge — *See* 'Patent Selvedge' and 'Selvedge'.

Rearing House — The house wherein silkworms are reared from hatching of eggs to formation of cocoons.

Reclaimed Wool — Wool recovered from rags, known as 'shoddy' or 'mungo'.

Reach

a) *See* Ratch (a), and

b) The distance from the back heald to the back rest or back roller of a loom (locally Ratch or Perry).

Reed

a) A device consisting of a number of wires closely set between two slats or baulks which may serve any or all the following purposes:

   i) Separating the warp threads,
   ii) Determining the spacing of the warp threads,
   iii) Guiding the shuttle, and
   iv) Beating up the weft.

b) *Jute* — The fibre coming from one jute plant, held together as a unit by the meshy structure of the fibre system; and

c) To draw ends through a reed.

Reed Number or Count of Reed — The number of dents per unit width of reed. There have been many units in common use. The recommended SI unit is dents/cm.

Reed Length (Jute) — The average length of jute fibre strands.

Reediness — Crack between groups of warp ends appearing either uniformly across the cloth or in an isolated manner.

Reeling — The process of winding silk filament from the cocoon.

Relative Humidity — The ratio of the actual pressure of the water vapour in the atmosphere to the saturation vapour pressure at the same temperature. The ratio is usually expressed as a percentage (*see also* Absolute Humidity).

Recommended Allowance — The percentage that, in the calculation of commercial weight and of yarn linear density is added to the oven-dry weight with or without previous washing to remove natural or added oils and dressings. For such materials, the recommended allowance is arbitrarily chosen according to commercial practice and includes the moisture regain. It may also include the normal finish that is added to impart satisfactory textile qualities to the material.

Regain — *See* Moisture Regain.

Renditta — The number of kilograms of cocoons required to yield 1 kg of raw silk. The cocoons yield is expressed in terms of renditta.

Example

If 18 kg of cocoons give 1 kg of raw silk, the yield is said to be 18 renditta.

Rereeling — The process of winding yarn reeled on small reels on to standard reel (150 cm) to make hanks for marketing.

RESHAM — Indian name for natural silk (*see also* Raw Silk).

Retting — The treatment on the crop to make the bast fibre strands more easily separable from the woody part (stick) of the stem by immersing the plants in water which sets up certain chemical and biological changes to help the process.

Ribbon Width (Cotton) — The width of the broadest part of a fibre between two successive convolutions.

Rigging — *See* Cuttle.

Ring Spinning — A system of spinning on a ring frame in which drafting of the roving, twisting of the yarn and winding it on the bobbin takes place simultaneously and continuously (*see also* Mule Spinning).

Rings (Raw Silk) — Places where a length of raw silk thread has, in reeling, been inadvertently wound in the form of ring instead of in its usual cross form, due to the thread having escaped from the traversing guide of the reeling machine. Rings increase waste in winding.

Rod Mats — *See* Mats (b).

Roots (Jute) — The hard, barky portions at the lower end of jute strand.

Rope — A material of cordage construction with a circumference of 25 mm or more.

Roping Yarn — *See* Coir Yarn (j).

Rove (or Roving)

a) *General* — A continuous, slightly twisted strand of fibres produced on a roving frame and from which yarn is spun; or

b) *Wool* — A continuous strand of fibres with no twist, made from the web produced on condenser card by splitting the web into a number of parts and then condensing each part by rubbing.

Rug — A piece of thick, heavy fabric used for floor covering.

Runnage (Coir) — Unit of linear density for coir yarn expressed as number of metres per kilogram or yards per pound.

Runners (Jute) — The hard barky jute strand running from its lower end to the middle or sometimes up to the tip of the fibre. This is due to incomplete retting.

S

Sappy Wool — Wool containing abundance of grease; consequently the yield of such wool is low.

Schappe — Spun silk yarn, particularly that which is made from stock which has been partly degummed by the schapping or maceration process.

NOTE — Such a fermentation process does not remove the gum entirely and hence schappe contains up to 10 to 12 percent of gum.

Scourage of Yarn (Coir) — A number indicating the fineness or coarseness of the coir yarn which is obtained by dividing the number of strands that could be laid very close to each other without overlapping in a length of 0·914 m (or 1 yd) by 20.

Scouring — Treatment of textile materials in aqueous or other solutions in order to remove natural fats, waxes, proteins and other constituents, as well as dirt, oil and other impurities.

Scroop — A property of finished silk such that the material has a characteristic feel and gives a crunching noise when crushed by hand. It is produced by acid treatment and appears to be due to the presence of fatty acids or some such lubricant.

Scutching

a) *Cotton* — An operation in preparing cotton for spinning that has three objects, namely, to reduce the cotton to loose open condition by beating it, removal of impurities remaining in the cotton after opening, and the formation of a continuous lap or web of cotton wound on to a rod for use on carding machine.

b) A cleaning operation given to bast fibres like flax and hemp, after they have been retted, to separate the fibres from the woody portion of the stalk.

Sechoiring (Conditioning of Hot Airing) — The technique of killing and drying the pupae in the cocoons by subjecting the cocoons to hot air of specific temperature in an enclosed chamber for required time without damaging the quality of silk in the cocoons.

Seed Cocoons — Cocoons of pure race of selected quality chosen for propagation.

Seed Cotton — Raw cotton (including seeds) as removed from boils. It is also called *KAPAS*.

Seedy Wool — Wool containing a variety of grass seeds difficult to remove.

Seed Hair — Fibres growing from the surface of seeds or from the inner surfaces of fruit cases or pods. Such fibres (seed hairs) are formed by the marked elongation of epidermal cells.

Note — From a botanical aspect, cotton is a seed hair, since it is an outgrowth in the form of single cells from the epidermis or outer skin of cotton seeds. In this respect, cotton differs from fine vegetable fibres, which are composed of a number of plant cells, usually joined and cemented together to form a bundle and often occurring in the stems (for example, flax) or leaves (for example, sisal) of plants of shrubs. Nevertheless, in commerce and industry, it is customary to refer to cotton as a vegetable fibre. Calotropis (akund) and Asclepias (milkweed) are other examples of hairs growing on seeds, whereas Eriodendron (Java kapok) grows on the inner surface and the placenta of seed pods.

Selvedges — The longitudinal edges of a fabric formed in such a way that its component threads cannot ravel.

Note — In jute industry, a selvedge is sometimes called RS or Real Selvedge to distinguish it from PS or Patent Selvedge.

Sericin — *See* Gum.

Sericulture — The art and science of raising silkworms for the production of cocoons.

Serrations — The scales of wool fibre, more in evidence on the finer wools.

Set or Sett

a) A term used to indicate the spacing of ends or picks, or both per unit length. It is usually expressed as ends or picks per decimetre (or centimetre); or

b) A synonym for 'Count of Reed'.

Shafty Wool — Well grown fleece wools having long uniform, sound staples.

Sheering (Wool) — To cut the fleece from a sheep.

Shives

a) Vegetable matter other than burr found in fleece, and

b) The short pieces of woody waste beaten from the straw during scutching.

Shoddy (Wool) — The fibrous material made in the woollen trade by pulling down new or old knitted or loosely woven fabrics in rag form (*see also* Mungo).

Shorn Wool — Wool obtained by shearing live sheep.

Shot (Jute) — A single thread of weft yarn running from selvedge to selvedge; it is inserted in one passage of the shuttle across the loom.

Shotting (Jute) — The number of weft threads per dm of the finished cloth.

Shrinkage — A decrease in dimensions of a fabric.

Silk — A protein substance which is secreted in the fluid state by silk worm (Caterpillar Stage of several silk moths) and which on exposure to air hardens in the form of a thread. It is composed mainly of fibroin and partly of sericin and other substances. (*see also* Mulberry Silk, *ENDI*, Muga Silk and Tasar Silk). The term is also used to denote a fabric or a yarn made from silk or waste silk.

a) *All Silk* — A term which may be applied to fabrics where no textile fibre other than silk is present, irrespective of the amount of weighing.

b) *Pure Silk* — A term which may be used only where there is no metallic or other weighting of any kind, except that which is an essential part of dyeing.

c) *Raw Silk* — *See* Raw Silk

d) *Silk Spun* — *See* Spun Silk.

Singed Yarn — *See* Gassed Yarn.

Singeing — *See* Gassing.

Singles — A term applied to thrown silk when its single threads have been twisted; used for chiffon.

Single Filament (Bast Fibre) — The finest fibre strand which appears single to the naked eye. It tends to be identical with a small fibre strand.

Single Yarn — A yarn which is either twistless or can be rendered twistless in a single untwisting operation.

Sinkage

a) Loss of weight in wool cleaning, usually expressed as a percentage.

b) Unaccounted or 'invisible' loss of weight in processing, usually expressed as a percentage.

NOTE — It is incorrect to use the word Shrinkage as a synonym for Sinkage.

Sinnet Mat — *See* (j) under Mats.

Sisal — A hard fibre obtained from the sword like leaves of the sisal plant, Agava sisalana and other Agava species. The fibres are long (60 to 180 cm), white or creamy white in colour, and are strong and durable. It is used extensively for the manufacture of binder twine, summer rugs, brushes, etc. Also known as Sisal hemp.

Size — A colloidal solution of materials, such as starch and glue, which is generally applied when hot before weaving and which when cold forms a film. It strengthens and stiffens the warp.

NOTE — The main types of substance used are corbohydrates and their derivates, gelatin, and animal glues, although other substances, such as linseed oil, polyacrylic acid, and polyvinyl alcohol are also used.

Size (Raw Silk) — Term used in respect of raw silk synonymous to count in respect of cotton, woollen and jute yarns. The size of raw silk is expressed in deniers (*see also* Denier).

Sizing — A process of applying size to the warp.

Skein — A definite length of sliver, slubbing, roving or yarn in the form of a coil made on a reel of a specified girth. A synonym for hank (*see* Hank).

Skein Breaking Tenacity — The maximum tensile stress developed in a test skein before rupture, expressed in force per unit linear density of the yarn constituting the skein. This is expressed in grams per tex.

Therefore, skein breaking tenacity, grams per tex

$$= \frac{\text{breaking load in grams of skein}}{2 \times \text{number of wraps in test skein} \times \text{linear density of unstrained yarn in tex.}}$$

Skin Wool — Wool obtained from the skins of slaughtered sheep, also known as pulled wool.

Skirting — Portion of the fleece obtained from head, face, legs and britch of sheep, usually removed from the fleece to make it uniform.

Slashing — *See* Sizing.

Slats *See* Battens.

Slipe Wool — *See* Skin Wool.

Sliver — A continuous assemblage of a strand of fibres without twist.

Slub — A defect in yarn characterized by thick uneven portions. Such a yarn is called Slubby Yarn.

Slubbing — A slightly twisted continuous strand of fibres produced on a slubbing machine.

Slub Yarn — It is a type of fancy yarn having slubs at intervals.

Snarls — Small curly portions in a yarn with twist.

Snarly Yarn — A yarn that shows excessive tendency to twist round itself if held with insufficient tension. It is also known as Kinky Yarn.

Soaking (Silk) — A process of treating raw silk with oil-in-water type of emulsions to soften the gum and render the threads pliable for winding, throwing and knitting.

Soft Silk — Thrown silk yarn, undyed or dyed, from which the gum has been removed.

Soft-Twisted Yarn — A yarn with twist less than the normal.

Soft Waste — Waste which is soft in nature and which has a little or no twist produced during the spinning process; obtained mostly in machines, such as, scutchers and cards; also includes clearer laps, sweepings, fly, etc.

Sorting (Wool) — Classification and separation of a fleece into parts on the basis of the quality of the fibre.

Souple Silk — Silk which has been dyed and from which only a part of the gum has been removed.

Souring — A process of treating loose cotton, yarn or cloth in dilute solution of an acid.

Specific Strength — A synonym for Tenacity.

Specific Stress — The ratio of force to mass per unit length (This ratio is equal to the stress per unit density). It is expressed as mN/tex or N/tex.

Specimen — A specific portion of material or laboratory sample upon which a single test is performed or which is selected for that purpose.

Specks and Leaves (Jute) — Spots of dry leaves and bark which appear above the root portion of the jute fibre and affect the appearance of the fabric. This is due to defective retting.

Spider Silk — The product mainly of *Nephila madaqascariensi*. One characteristic of spider silk is its fineness; the diameter of filament of *Eptira diadema* is about one-twentieth of that of silk filaments. Spider silk can be spun and woven but with great difficulty.

Spinner's Waste — All types of waste produced during the conversion of fibres into yarn.

Spinning

a) *General* — The process or processes for producing single yarns.

b) *Silk*

i) The process of making yarn out of discontinuous filaments of silk, and

ii) An operation by which silkworms produce cocoons.

Split — The space between two adjacent wires of a loom reed. The term is also used for a wire of the loom reed.

Splits — Fabrics woven with split selvedges.

Split Selvedge — *See* Patent Selvedge.

Spool — *See* Cheese.

Spun-Silk (Yarn) — Yarn made from waste silk and pierced cocoons, by dressing and spinning; it is composed of short lengths of filaments ranging from 2·5 to 20 cm.

Spyndle — A unit of length used in the determination of count or grist of jute yarn; it is equal to 13 167 m (14 400 yd).

Staining

a) Any adventitious (unwanted) colour, for example, dye, dirt, or iron, on textile material.

b) The fugitive or permanent colouring of textile materials with different colours for example, in histology for identification.

Standard Atmosphere — *See* Atmospheric Conditions for Testing.

Staple Length — An estimated length of a majority of fibres in a sample of raw cotton.

Steeping

a) *General* — The treatment of textile materials in a bath of liquid, usually, though not necessarily, without continuous or intermittent agitation. The term is also applied to processes whereby the materials are impregnated with a liquor, highly squeezed, and then allowed to lie.

b) *Flax* — The process of retting flax straw by immersion in an aqueous liquor.

Stentering — The stretching to required width and drying of cloth.

Stifling — *See* Sechoiring.

Straight Reeled Skeins — The skeins made by direct reeling that is without re-reeling, for example, *charkha* and domestic basin reeling.

Strand

a) A single fibre, filament or monofilament; or

b) A single ordered assemblage of textile fibres having a high ratio of length to diameter and normally used as a unit including slivers, rovings, single yarns, plied yarns, cords, braids, ropes, etc.

Strazza (Italian) — *See* Gum Waste.

Strength — The ability of a material to resist rupture induced by external forces, for example, breaking strength, tear strength, bursting strength; etc.

Strings — Small pieces of thread inserted at the selvedges of fabrics to indicate defects. Also known as 'flaggings'.

Strick (Flax/Jute) — A small bunch of flax straws, of scutched flax, or of hackled flax, of a size that can be held in the hand.

NOTE — In the jute section of the textile industry, it is also known as strike, and refers to a bunch of jute similar to a 'head' but smaller, usually 1-2 kg.

Strusa (Italian) — *See* Frison.

S-Twist — *See* Twist.

Suint

a) Excretions from the sweat glands of sheep, principally consisting of potash salt; or

b) The water-soluble portion of yolk.

Sunn — A soft fibre obtained from the inner bark of sunn plant, *Crotolaria Juncea*. The fibres are long (45 to 150 cm), grey or brown with a wide range of colour and quality due to differences in preparation. It is used mainly for twines and cordages. It is also known as Sunn Hemp, Bombay Hemp, Madras Hemp, India Hemp, Sana, etc.

Sweeping Waste — Sweepings from the floors or from various rooms in a textile mill.

Swollen Fibre Diameter (Cotton) — The diameter of a fibre when swollen to its maximum extent in 18-percent caustic soda solution.

T

Tail End — The finishing end of a woven piece or a package of yarn.

Tape — A woven narrow fabric not exceeding 10 cm in width and not exceeding 3·4 g/m/cm width.

Tape Length — The distance between the successive cut marks inserted during sizing of warps.

Tare — The weight of all external and internal packing materials of a case, bale, or other type of container including the weight of bobbins, tubes, etc.

Tasar Silk — Silk of natural copperish colour obtained from a species of wild lepidopteran insect (*Antheraea Mylitta*) belonging to the Assamensis group. It feeds on the leaves of a variety of forest trees such as Asan (*Terminalia tomentosa*), Arjun (*Terminalia Arjuna*), Ber (*Zizyphus Jujuba*), Sal (*Shorea robusta*), and Himalayan oak (*Quercus Serrata*), and is habitant of Bihar, Orissa, Madhya Pradesh, West Bengal and Andhra Pradesh.

Tearing Strength — The force required to start or continue a tear in a fabric under specified conditions.

Tenacity — The breaking load of a material under test divided by the linear density of the unstrained material expressed as mN/tex.

Tensile Strain — The relative length deformation exhibited by a specimen subjected to a tensile force. Strain is expressed as a fraction of the nominal gauge length; also as a percentage (*see also* Elongation).

Tensile Strength

a) *General* — The strength shown by a specimen subjected to tension as distinct from torsion, compression or shear.

b) *Specific* — The maximum tensile stress expressed in force per unit cross-sectional area of the unstrained specimen, for example, kg/mm^2.

c) *True* — The maximum tensile stress expressed in force per unit cross-sectional area of the specimen at the time of maximum load.

Tensile Stress — The resistance to tensile deformation developed within a specimen subjected to tension by external force. The tensile stress is expressed in two ways, as the force per unit cross-sectional area of the unstrained specimen or as the force per unit linear density of the unstrained specimen. The latter is more frequently used in textile testing and is referred to as specific stress.

Tensile Test — A test in which the resistance of material to a force tending to stretch it in one direction is measured.

Tentering — *See* Stentering.

Tex — The direct decimal system based on metric units as the universal system for describing the linear density (mass per unit length) of fibres, filaments, slivers, and yarns; it is also the name given to the combination grams per kilometre (*see also* Count).

The multiple and sub-multiples recommended for use in preference to other possible combinations are as follows:

Grams per metre or kilograms per kilometre — Kilotex,

Milligrams per kilometre — millitex.

Decigrams per kilometre — Decitex.

Textile — Originally a woven fabric; the term is now applied to any manufacture from fibres, filaments or yarns, natural or man-made, obtained by interlacing.

NOTE — For example, thread, cords, ropes braids, lace, embroidery, nets, and cloths made by weaving, knitting, felting, bonding, and tufting are textiles.

Thread — The result of twisting together in one or more operations two or more single, folded, or cabled yarns.

Note 1 — The term is frequently used to describe single yarns.

Note 2 — In the natural silk industry, threads is used as a synonym of fold, for example, 3 thread 13/15 denier yarn.

Throwing (Silk) — A process of winding with or wihtout soaking and doubling and twisting of raw silk to make it into yarn suitable for knitting, weaving, etc.

Threads per Unit Length (Woven Fabric) — The number of weft yarns (picks) in a specified length of fabric.

Note 1 — The traditional unit of length has been the inch but the value should now be expressed as 'threads/cm' although the actual count may be made over 1 cm, 2·5 cm, 5 cm or 10 cm, according to the nature of the fabric.

Note 2 — Counting may be done at the following stages of manufacture:

a) *In the Loom* — The position of the count should be agreed. It is usually taken between the fall of the cloth and the take up roller, with the cloth under weaving tension.

b) *Loomstate* — The count is taken after the cloth has been removed from the loom and is relaxed from weaving tension, but before it is subjected to any further treatment that modify its dimensions.

c) *Finished* — The count is taken when no further processing in the piece is contemplated.

In all cases, the condition of the cloth at the time the count was taken should be specified.

Threads per Unit Width (Woven Fabric) — The number of warp yarns (ends) in a specified width of fabric.

See Threads per Unit Length (Woven Fabrics Notes 1 and 2.

Thrums — Those unwoven parts of warp yarn at the beginning and end of the loom beam which are cut off and generally used for joining broken warp threads during weaving.

Time-to-Break — The time interval during which a specimen is under (a generally increasing) tension, to reach the breaking load.

Note — Time-to-break does not include the time required to remove slack from the specimen. On machines supplied with an autographic recorder, the time-to-break is indicated by the time elapsing after the pen registers the initial tension sustained by the specimen until the pen registers the maximum force.

Tinting — Colouring of fibres and yarns with fugitive colours to permit easy distinction.

Top

a) *See* Wool Top.

b) *Jute* — Indicates a quality of raw jute (*see also* Grading of Jute).

Top Dyeing — Dyeing of wool fibres in the form of worsted tops.

Topping

a) Bringing up to shade by dyeing on the top of other colours, or

b) A light cut on a shearing machine; also called 'Ending .

Toughness (or Specific Work of Rupture) — It is the energy per unit mass required to rupture the specimen. It is the integral of the nominal stress strain curve and is calculated by dividing the work of rupture by the mass of the specimen under test.

Tow

a) *Flax or Hemp* — Any substantially clean fibre of less than scutched length,

b) *Man-made Fibres* — A large number of filaments collected into a loose strand or assemblage substantially without twist.

Tram — Soft silk yarn consisting of raw silk threads (usually two) twisted together with a few turns, say, 1 to 2 cm; used for weft.

Trash (Cotton) — Foreign matter present in bales of raw cotton, excluding abnormal items such as stone, timber, pieces of old iron, etc.

NOTE 1 — Normal wholes seeds, either ginned or unginned, are frequently excluded from this category, but broken portions of them and also whole or broken undeveloped seeds are usually regarded as trash.

NOTE 2 — The main component of trash is chaff including bits of seeds, leaves and stem. Dirt in the form of soil or sand is another component of trash. Fragments of foreign fibres, such as sisal, jute, hemp, etc, are sometimes regarded as trash but usually receive special reference when easily recognizable.

Truss (Jute) — A bundle or small bale, suitably covered or wraped but neither hooped nor machine pressed.

Tsatlee Silk — Chinese hand-reeled silk which is uneven and is more imperfect than filature silk. It is sometimes called 'Book-silk'.

Tussah Silk — *See* Tasar Silk.

***T-VYCOME* Yarn** — *See* Coir Yarn (k).

Twill Weave — A weave that produces diagonal lines on the surface of the cloth.

Twine — A plied yarn made by twisting together two or more strands of yarn.

Twist

a) The spiral disposition of the components of a yarn which is usually the result of relative rotation of the two ends.

b) The number of turns per unit length of a yarn expressed as turns per metre (tpm) or turns per inch (tpi).

c) *S-Twist* — The twist in yarn due to which its spirals are in line with central portion of letter *S*, when the yarn is held in a vertical position (*see* Fig. 2).

d) *Z-Twist* — The twist in yarn due to which its spirals are in line with central portion of letter *Z*, when the yarn is held in a vertical position (*see* Fig. 2).

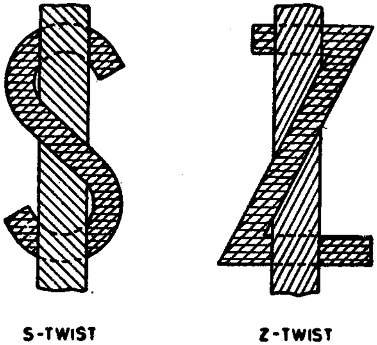

FIG. 2 *S*- AND *Z*-TWISTS

Twisted Yarn — *See* Folded Yarn.

Twisting — *See* Doubling.

Twist Factor, Twist Mutliplier — A measure of the 'twist hardness' of a yarn determined by the multiplication of the turns per unit length by the square root of the linear density on a direct system, or the division of the turns per unit length by the square root of the count on an indirect system. Typical examples of units of twist factor are:

a) Turns per centimetre multiplied by $\sqrt{\text{linear denacity of yarn in tex}}$;

b) Turns per inch divided by $\sqrt{\text{cotton count of yarn}}$.

Unit (a) is the recommended SI Unit.

Twistless Yarn — A yarn prepared without twist in order to obtain special properties, for example, increased softness and dyeability.

Twist-on-Twist — Descriptive of a folded yarn in which the direction of the folding twist is the same as that of the single twist.

NOTE — The use of this term to indicate a specific direction of twist should be discouraged.

Twist Release — The extension in length of yarn on untwisting, expressed as a percentage of the length of twisted yarn.

Twist Take-up — The decrease in length of yarn on twisting, expressed as a percentage of the yarn before twisting.

NOTE — As the length of yarn before twisting may not be known, the length of the yarn after untwisting may be treated as equal to the length of the untwisted yarn for practical purposes.

Twitty — Describes yarn of irregular thickness and twist, and brittle in places.

U

Ultimate Fibre — A botanical cell of leaf and bast fibres.

Unevenness — The non-uniformity of the linear density of a continuous strand or portion of a strand. Following three principal expressions for unevenness are in use:

a) *Unevenness, Cofficient of Variation* — The square root of the average of the squares of the deviation of linear density from the average linear density, expressed as percentage of the average linear density within the tested length of strand.

b) *Unevenness, Percent Mean Deviation* — The average of the absolute values of the deviation of linear density from the average linear density, expressed as percentage of the average linear density with the tested length of strand.

c) *Unevenness, Percent Mean Range* — The average of the ranges of linear density found within units of equal length, expressed as the percentage of linear density within the tested length of strand.

Union Cloth — A cloth made with warp of one kind of fibre and weft of another.

Note — Originally the term related to clothes made from cotton warp and wool weft or from linen warp and cotton weft.

Univoltine Cocoons — Cocoons built by a silk-worm race with one generation (life cycle) in a year.

Multivoltine Cocoons — Cocoons built by a silk worm race with more than two generations (life cycle) in a year.

V

Vicuna (Fibre) — Undercoat hair of the vicuna, an animal of the llama family.

Virgin Wool — Wool which previous to its present use as a textile raw material has not been spun into yarn or felted.

***VYCOME* Yarn** — *See* Coir Yarn (m).

W

Wall Thickness — Thickness of the cell wall of a fibre.

Warp (Warp Yarn)

a) Threads lengthways in a fabric as woven, or

b) A number of threads in long lengths and running in the same direction intended for weaving or knitting.

Warping — The process of preparing a warp for weaving or knitting. A number of methods are employed such as beam warping, chain warping and sectional warping.

Washed (or Steeped) Silk — Raw silk which has been soaked in warm soap solution so as to soften its gum and loosen its threads.

Wastes — Processing by-products in the manufacture of yarn and cloth.

Waste Silk — Silk from wild and cultivated cocoons which cannot be reeled and silk from the unreelable parts of the cocoons. It also includes the waste produced during the various processes of silk reeling and throwing. It is used as a raw material for spun-silk.

Wales and Courses

a) *Wale* — A longitudinal chain of loops in a knitted fabric or garment formed by one needle,

b) *Course* — A transverse row of loops in a knitted fabric or garment.

Weaving — The interlacing of warp and weft with one another to form a fabric.

Webbing

a) A woven narrow fabric which weighs over 3·4 g/m width (or 2·5 lb gross yd/in width); or

b) A term of classification referring to webbings in general.

Weftage (Coir) — The number of transverse strands of yarn in a matting per decimetre (or foot).

Weft (Weft Yarn)

a) Yarn widthways in a fabric as woven; or

b) Yarn intended for use in a fabric widthways.

Weight (Gross) — The total weight of a consignment, case, bale or sample; includes the weight of packing materials, containers and of supports, such as cones and bobbins.

Weight (Net) — The difference between the gross weight and the tare.

Weighted Silk — Silk which has been increased in weight and bulk by the addition of chemicals.

Wet Spun

a) Descriptive of a yarn of flax, hemp, or similar fibre spun from roving that has been thoroughly wetted out in hot water immediately prior to the drafting operation.

b) Descriptive of man-made filaments, the coagulation of which is effected by extrusion into a liquid bath.

Winding — An operation of transferring yarn from one form of package to another.

Wool — Primarily, hair from the fleece or coat of the sheep, but extended by usage to include also that of the alpaca, camel, dromedary, llama, vicuna, Cashmere goat and Angora Rabbit.

Woollen Count

a) *Dewsbury* — The linear dencity of woollen yarn, expressed as number of yards per ounce.

b) *Yorkshire* — The linear density of woollen yarn, expressed as 256 yd skeins per pound.

Woollenized Jute — Jute fibre when subjected to mercerising treatment under controlled conditions becomes crimpy like wool and soft and fluffy; the treated jute with or without further chemical softening treatment.

Woollen Yarn — A yarn spun from wool which has been carded but not gilled or combed before spinning and which the fibres cross each other in every direction presenting a rough surface.

Wool Quality — The spinning quality of wool assessed primarily on the basis of fibre fineness. Crimp, waviness, handle, etc, also influence wool quality.

Wool Top — Continuous untwisted sliver of wool fibres from which the shorter fibres or noils have been removed and the fibres brought parallel to each other by combing.

Wool Yield (Clean Wool Fibre Content) — The weight of wool fibres, free from vegetable matter, grease, dirt and other impurities and adjusted to the standard condition of 13·8 percent moisture content, 1·5 percent alcohol extractable matter content and 0·5 percent ash content; the latter two calculated on the basis of the oven-dry weight of the scoured specimen (IS : 1349-1964*).

Work of Rupture — It is the energy required to bring a specimen to rupture under a (tensile) deformation test. It is the integral of the load-elongation curve and is dependent on the linear density and length of the specimen.

Worsted Count — The linear density of worsted yarn expressed as number of 560 yd hanks lb. (*see also* Count of Yarn).

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*Method for determination of wool fibre content of raw wool (*revised*).

Worsted Yarn — A yarn spun from wool fibres which have been carded and either gilled or combed or both.

X

X-Bottom — Indicates a quality of raw jute (*see* Grading of Jute).

Yarn — A continuous strand of textile fibres of filaments with or without twist, suitable for plying, knitting, braiding, weaving or otherwise inter twining to form a textile end product. Yarn occurs in the following forms:

a) *Spun Yarn* — A yarn composed of fibres (short length or staple) twisted together.

b) *Filament Yarn* — A yarn composed of continuous filaments assembled with or without twist.

c) *Monofilament* — With or without twist.

d) *Narrow Strip of Material* — Such as, paper, cellophane or metal foil, with or without twist.

NOTE — Varieties include single yarn, plied yarn, cabled yarn, cord, thread, fancy yarn etc.

Y

Yarn Construction — Construction which indicates the material, count of single yarn, number of turns per unit length, number of plies and the direction of twist in the plies.

Yarn Count — *See* Count.

Yarn Package — A length or lengths of yarn in a form suitable for handling, storing or shipping. Packages may be unsupported as skeins or cakes, or prepared with various winding patterns on bobbins, cops, cones, pirns, spools, tubes or beams.

Yarn Regularity — Pertaining to evenness of yarn.

Yarn Strength Index (YSI) (Cotton) — The breaking load, in grams of a 100-m skein divided by the linear density of yarn expressed in tex units [*see also* Break Factor (skeins) and Count Strength Products].

Yolk — Extraneous matter of animal origin in greasy wool.

Yellowing — The yellow discolouration that may develop on textile materials during processing, use or storage over a long period.

Z

Z-Twist — *See* Twist.

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